

I object to paragraphs 5.20 and 5.26, both of which express a 'presumption in favour of aquaculture in coastal areas' and to Policy 28 Supporting Sustainable Aquatic and Coastal Development so long as the term aquaculture includes fish farms. I oppose aquaculture that includes fish farms on the following grounds:

Visual and Landscape Impact

The entire coastline of Bute, where I live, is an Area of Panoramic Quality. But almost every place you can travel to in Argyll and Bute Council is beautiful, with spectacular scenery that draws visitors to the area as well as makes life pleasant for permanent residents. The entire A&B Council region relies greatly for tourism in supporting its economy. People coming to visit the region do not want to see fish farms from the decks of ferries, nor do passengers on the Waverley. Motorists enjoying a drive along a scenic route don't want to see fish farms in the view. Bathers at beaches do not want to wonder if there are pollutants from fish farms in the water they are immersed in. Sailors and sea kayakers do not want to be pushed from coastlines and safe havens by fish cages. Cyclists and walkers do not want to look out and view fish farms. In relation to a proposed fish farm off the coast of Bute the local group Buteiful Coasts did a survey and one of the questions asked *12. In general, do you think that fish farms have an impact on tourism in the area they are sited?* 76.8% or 43 respondents said a negative impact.

Socio – Economic Impacts

I object to already existing jobs which bring money into the local economies being impacted by an industry from which most profits do not benefit the local economy and perhaps not even the country. Look at the response of the Clyde Fishermens Association to the application to enlarge the fish farm at Ardyne to see how fish farms are impacting on their jobs and livelihoods. The Clyde Marine Regional Assessment 2017 (<http://www.clydemarineplan.scot/wp-content/uploads/2018/02/Clyde-Marine-Region-Assessment-2017.pdf>) provided the following information about aquaculture in the area:

Total direct employment in 2014 was 160 jobs, a decline in numbers of 30 jobs since 2010. GVA had increased to a figure of approximately £11m at the end of 2013 although employment had decreased most likely due to greater levels of automation across the sector.

This idea that production can be increased with no resulting increase in jobs is borne out by the recent SSC application to enlarge their operation at Ardyne. They propose to almost double the tonnage of fish produced without increasing employment.

Compare as well the figures regarding aquaculture in the CMRA report as opposed to the figures for tourism in the same region:

Employment in sustainable tourism jobs in the region in 2014 was 35,000 jobs with total sustainable tourism turnover in the wider CMR just under £2billion in 2013. More specifically, look at the Argyll and Bute Economic Forum Report 2016 which said that 15% of all jobs in Argyll and Bute are tourism related.

Finally, looking at the most recently available statistics from the Scottish Government let's compare the importance of tourism and aquaculture to our economy: The report *Tourism in Scotland: The Economic Contribution of the Sector (April 2018)* reported that in 2016 tourism contributed £6 billion or 5% of total GVA, supporting 207,000 jobs or 8% of total jobs in Scotland. The report *Scotland's Marine Economic Statistics (October 2018)* reported that in 2016 aquaculture contributed £216 million or 0.16% of total GVA, supporting 2,300 jobs or 0.09% of jobs in Scotland.

It seems somewhat obvious that as region blessed with a long coastline, open waters and beautiful views we should not be selling and degrading our natural assets with little local benefit for minimal jobs so that a few company directors profit from our resources but we should look at how best to enhance and showcase our natural assets to encourage visitors whose pounds will enter directly into circulation in the communities they visit and create/maintain a higher number of jobs.

The Bute Economic Forum Report 2016 contained many findings similar to those contained in the CMRA. Regarding employment figures specific to Argyll and Bute the report states that at the end of 2013 there were 35,485 total jobs. 15%, or 5,322 were in the tourism sector. The report identified 489 jobs related to finfish. That is 1.3% of jobs. The report said that

“From visitor surveys we know what the customer wants from Argyll and Bute:

SIGHTSEEING AND LANDSCAPE 56%

TRYING LOCAL FOOD 54%

SHORT WALK, STROLL 49%

VISITING A BEACH 43%

LONG WALK, HIKE, RAMBLE 40%

VISITING A HISTORIC HOUSE OR SITE 38%

SHOPPING 38%

CENTRE BASED WALKING 35%

Source: Visit Scotland Visitor Survey 2011

So this tells us the key focus areas for our branding: scenery, food, walks and cultural sites. It also stresses five things from an operational point of view:

1. We need to do everything we can to preserve our landscape.

Allowing fish farm is not a means to preserving a landscape and the number of jobs related to fish farming will never support the island economies or provide the numbers of jobs that are required to provide a living for residents or attract new residents.

If one of the aims of A&B Council is not only to increase tourism but to grow the region's population, how is allowing fish farms that will mar the scenic beauty and degrade the water quality of the coastal waters a means of tempting incomers? As islanders and residents of very rural areas we must sometimes sacrifice things that mainland or urban dwellers take for granted: we may be tied to ferry schedules that can be disrupted by adverse weather so that we cannot just go wherever we'd like whenever we'd like or to roads that can be closed to landslides in bad weather; we may lack retail choice and may not have access to the variety of leisure options that mainlanders or urban dwellers do; we may have reduced/basic health care facilities, we may have reduced job options. What we do have, and what draws newcomers to island/rural life, is magnificent landscapes and sea views, with opportunities to see wildlife/sealife, to live a life closer to nature and to enjoy the remoteness, quietness and safety that island/rural life can provide. That is what makes up for all the things we give up and if you begin to degrade these aspects of island/rural living then you will not attract new people.

Environmental Degradation

I object to the use of the public asset of the sea for profit in such a way that it is degraded. Some specific ways in which I believe the sea will be degraded are:

The use of chemicals such as emamectin benzoate, cypermethrin, deltamethrin and azamethiphos. These are all highly toxic to other crustaceans that live at or near to the proposed site, and in fact could affect crustaceans even farther away as the SEPA Fish Farm Survey Report October 2018 showed that the dispersion area and endurance time for such chemicals was greater than previously thought. And dispersion does not mean disappearance. Moving it away from the source point does not mean it no longer exists. Look at the fact that there are particles of plastic falling in the snow at the uninhabited poles to understand that dispersion is just a way to hide the fact that waste is being put into the sea. If a farmer said that he was going to “disperse” the slurry from his farm by dumping it in a burn so that it would run out to the sea would that be acceptable? The farmer must bear the costs involved in processing and disposing of the waste. Fish farm owners bear no such costs, to the detriment of the environment we all share, and this should not be given permission by the bodies that are in place to protect that environment.

Fish farms use ADDs to deter seals and, if necessary, even shoot seals. However, ADD use will impact other species of sea life in addition to seals. In the ECCLR report the effectiveness of ADDs on seal predation was questioned. Again, relating to tourism, the siting of seals and other marine mammals is one of the reasons people visit the A&B region, as well as why sailing and kayaking in the area is so popular.

The use of cleaner fish is a multiplier of the unsustainability of fish farming. The capture of cleaner fish decimates those populations and causes imbalances in the environments they are taken from. They are wasted when the salmon/trout are harvested. Even if they are bred, not wild, all these cleaner fish need to be fed, so there is more feed that needs to be sourced as well as greater amounts of waste that enters the water.

The unsustainability of sourcing feed for farmed salmon/trout. It takes 1.7 kg of dry fishmeal, sourced from 5 kg of fish, to produce 1 kg of salmon. This is an absurdly wasteful use of precious natural resources. And to now add feeding the cleaner fish, which will themselves perish at the end of the cycle, is deeply disturbing. It was reported on BBC radio last year that currently the fish farm industry uses an amount of fish to produce its fish feed equivalent to the amount of fish eaten by the entire UK population in one year.

The degradation of water. It seems like we have not learned any lesson from the past: sludge boats from Glasgow dumped their cargoes daily from 1904 to 31 December 1998 just south of Garroch Head off Bute. Through the 1990s 1,500,000 tonnes of sludge was being dumped at the site annually (<https://www.gov.scot/publications/scottish-marine-freshwater-science-volume-3-number-3-clyde-ecosystem/pages/5/>). Perhaps the area radiating from this site that still manifests degraded water quality 20 years later is indicative of the dispersal zone from the site? Yet, council will allow fish farms to be set up. Dr Richard Luxmore, senior nature conservation officer of NTS says that a “single fish farm, which currently has a maximum size of 2,500 tonnes, produces the sewage equivalent of a town twice the size of Oban (The Herald 15 March 2018). That means that any fish farm one sees is adding the equivalent sewage from approximately 35,000 people to the surrounding area. That cannot lead one to hope that the water quality in the area will improve. In fact, might it actually cause it to worsen? And who will monitor this? Why should the places that belong to and are used by everyone freely be impacted for the profit of a few? Recommendation 29 of the REC report 2018 states: “The Committee believes that it is essential that the issue of waste collection and removal is given a high priority by the industry, the Scottish Government and relevant agencies. It is clearly one of the main impacts on the environment and needs to be addressed as a matter of urgency.”

Lastly, I would like to support everything that the S&TCS says about the effects of fish farming on the loss of wild populations of fish. This loss of biodiversity is a degrading of the environment that should not be allowed.

Brand Scotland

Brand Scotland in relation to farmed fish produce has always relied on the image of fish being raised in a pristine environment, equivalent to that of wild fish. The realities are becoming more widely known. Sir David Attenborough and Jeremy Paxman have now made videos decrying the practices of fish farming. The One Show and Panorama have had programmes looking into the environmental issues associated with fish farming in Scotland. The NTS and STCS are both calling for moratoriums on further fish farm development. In the 19 May 2019 edition of the Scottish Mail on Sunday there was an article on page 14 noting that The Coop will no longer print the words “sustainable sources” on wraps and sandwiches made with Scottish farmed salmon. Both the ECCLR report early in 2018 as well as the REC report later in 2018 agreed that the status quo is not an option. The film *Artifishal* made by the company Patagonia is touring the world and raising awareness of the impact of fish farming, including promoting a petition to the governments of Iceland, Norway and Scotland to stop the practice that has hundreds of thousands of signatories. Denmark has just banned open cage fish farming. Norway is incentivising the move to land-based recirculating aquaculture systems (RAS). Washington State in the US banned open cage fish farms last year and Alaska has had a ban on fish farms for decades – Brand Alaska is truly wild salmon sourced from a pristine environment. The major markets Scottish producers seek, the US and China, are pursuing alternatives to open cage farms. In China they are beginning experiments with fish farms on ships and in the US there are 3 RAS sites purchased in Maine, 1 in Virginia, another in Maryland and one in Eureka, California. Atlantic Sapphire, already operating an RAS in Denmark successfully, is set to produce 9,500 tonnes of salmon at its new RAS in Miami in quarter two of 2020. Starting with smolts at one end of the plant, mature salmon are processed and put on lorries at the other end of the plant. They are cutting the food miles associated with eating salmon and creating fertiliser and biogas from the waste produced by the fish. Their intention is to produce 90,000 tonnes of salmon per year, 50% of what is currently produced by all salmon farms in Scotland. Why will anyone buy Scottish fish that is fouling the seas, dosed with antibiotics and treated with chemicals to fend off disease and lice, and then needs to be transported thousands of miles greatly ramping up its carbon footprint. People, especially younger people, are increasingly aware of such issues. Let’s face it, you can get as much or more omega nutrients from flax seed, flax seed oil, walnuts and chia seeds as you can from farmed salmon (<https://www.healthline.com/nutrition/12-omega-3-rich-foods>). If Brand Scotland salmon is to exist in another decade it would require stopping all the open cage fish farming to allow an increase in natural salmon. This would then bring back the rural jobs provided by the anglers who used to come to Scotland for salmon fishing (see the linked article from the Sunday Post 5 May 2019 which describes the loss of this business and its impact on rural communities, as there are no longer wild salmon to be caught and anglers are now heading to Norway, Russia and Chile. Here is a quote from the article – “The general consensus amongst anglers is that an industry worth over £120m to the economy, supporting in excess of 3,000 jobs and generating an average spend on fishing trips to Scotland by tourists of around £5,000 per trip is largely being ignored. That has to end.” <https://www.sundaypost.com/fp/what-we-are-risking-is-an-ecological-disaster-as-potent-as-losing-eagles-from-our-skies-but-there-is-still-much-we-can-do-today-as-a-national-icon-of-scotland-fights-for-its-very-survi/>). Local authorities that continue to give permission for new fish farms will find themselves on the wrong side of history when reviewed further down the road. With the new Islands Act Scotland ready to come into effect, islanders may retroactively challenge some of these

decisions as islands bear the brunt of the environmental burdens and degradation caused by siting these fish farms on their shores.

Precautionary Principle

Finally, I ask A&B Council to accept its responsibility to apply the Precautionary Principle in relation to fish farms and cease considering applications for fish farms.

First, a reminder of why the Precautionary Principle should be followed. The UK signed The United Nations Convention on Biological Diversity in Rio in 1992. At its heart is Principle 15, which states that:

'In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.'

The agreement in Rio was followed by the UN Convention for the Protection of the Marine Environment of the North-East Atlantic, which the UK signed, and which also incorporated a commitment to adopt a precautionary approach.

'Preventive measures are to be taken when there are reasonable grounds for concern that human activities may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship. A lack of full scientific evidence must not postpone action to protect the marine environment. The principle anticipates that delaying action would in the longer term prove more costly to society and nature and would compromise the needs of future generations.'

This rational and wise approach is called the Precautionary Principle. It is mentioned in the concluding paragraphs of the ECCLR report of 2018:

Conclusions

344. It is clear to the Committee that the same set of concerns regarding the environmental impact of salmon farming exist now as in 2002 but the scale and impact of these has expanded since 2002. There has been a lack of progress in tackling many of the key issues previously identified and unacceptable levels of mortality persist.

345. Over that period there appears to have been too little focus on the application of the precautionary principle in the development and expansion of the sector.

346. Scotland is at a critical point in considering how salmon farming develops in a sustainable way in relation to the environment. The planned expansion of the industry over the next 10-15 years will place huge pressures on the environment. Industry growth targets of 300,000 -400,000 tonnes by 2030 do not take into account the capacity of the environment to farm that quantity of salmon. If the current issues are not addressed this expansion will be unsustainable and may cause irrecoverable damage to the environment...

354. *The Committee is supportive of aquaculture, but further development and expansion must be on the basis of a precautionary approach and must be based on resolving the environmental problems. **The status quo is not an option.***

355. *The current consenting and regulatory framework, including the approach to sanctions and enforcement, is inadequate to address the environmental issues. The Committee is not convinced the sector is being regulated sufficiently, or regulated sufficiently effectively. This needs to be addressed urgently because further expansion must be on an environmentally sustainable basis.*

Likewise, the REC report issued later in 2018 states:

Recommendation 48

The Scottish Government should provide strong and clear leadership in ensuring that the precautionary principle is applied, producing appropriate policy and guidance documents as necessary. These should make clear that the potential impact on the environment, known wild salmon migratory routes and other species must be comprehensively and robustly assessed and fully taken into account as part of the consideration of salmon farm applications.

A&B Council states numerous times throughout the LDP2 document that development will not be considered at the risk of the environment. Below are excerpts of many of those statements. In the case of fish farming, where there are so many unknowns about the impact of fish waste, medicine and chemical use, the effects on wild fish, the degradation of water quality, etc the only wise choice is to apply the precautionary principle and cease the activity. It is one thing to write fine words to make the council appear to be taking action to protect the environment, particularly as Scotland has declared a Climate Crisis and will be hosting the international climate change conference in Glasgow. In fact, 2020 has been declared a year to celebrate our magnificent coasts and marine environments! The proof though is in the application of policies and walking the walk not just talking the talk. I especially urge that consideration be given as to whether fish farms are truly compatible with statements made throughout the LDP2:

P4 Vision...A successful, sustainable place; A low carbon place; A natural, resilient place

P5 The vision for the LDP2 is:an economy based on sustainable development that benefits both economically and socially from its outstanding natural environment whilst protecting those very same special qualities

P5 LDP2 policies and design guidance promote the creation of safe, inclusive and high quality places where people want to live, work, invest and visit and where they are encouraged to lead active lifestyles.

P7 High Quality Environment: the LDP2 through its policies and design guidance will protect, conserve and enhance qualities of the natural, historic and built environment

P8 The spatial strategy for the LDP2 seeks to promote a simpler and more flexible approach to new development in Argyll and Bute, whilst recognising the importance

of all new development encompassing a sustainable approach.....without compromising the ability of future generations to meet their own needs.

P22 Climate Change and Principles of Sustainable Development: 3.37 Climate change caused by the burning of fossil fuels coupled with the consumption of natural resources and the generation of waste now represent existential threats to human civilisation globally

P23 3.40Waste must also be reduced to avoid polluting our environment....

P23 3.43 ...Encouraging development that is sustainable in terms of design, siting, types of materials and energy consumption; Protecting and enhancing our biodiversity through our policies, the ecosystem approach taken in the Local Biodiversity Action Plan (LBAP) and the inclusion of a biodiversity checklist for significant development; Safeguarding our existing waste sites and reducing waste at every opportunity; Minimising the impact on the water environment both in terms of abstraction and pollution

P24 3.44 The LDP2 seeks to enable the delivery of long term sustainable development in order to...maintain and improve the quality of life of those living and working in Argyll and Bute; and to protect our outstanding natural and built environment

P24 Policy 04 – Sustainable Development; k)avoid having significant adverse impacts on land and water environment

P26 – 28 High Quality Places – Green Infrastructure 4.6 – 4.10 could anyone in good conscience say that fish farms in any way meet these criteria

P27 High Quality Places – Policy 06 Green Infrastructure again, could anyone in good conscience say that fish farms in any way meet these criteria

P28 4.19 Sustainable development is defined within the SPP as being development that meets the need of the present without compromising the ability of future generations to meet their own needs

P33 Policy 14 – Bad Neighbour Development PLEASE ENFORCE THIS AGAINST FISH FARMS (the residents near the Ardyne fish farm who wrote letters to the council re enlargement of that farm would be overjoyed!)

P41 5.3 ... The strategic regeneration and environmental improvement aims with a particular focus on Dunoon, Rothesay and Campbeltown will support the delivery of an inclusive economy. The natural and built environments are both key to the economic success of the area. It is , therefore, important that new development safeguards these assets, and, where appropriate, seeks to enhance Argyll and Bute’s rich resource....

P49 Diagram 6 Tourism can anyone look at this map, with its plethora of activities – cyclists, kayakers, walkers, sailors, artists, motorists, ferry passengers can all expect to find places of interest, spectacular scenery, etc - and think, oh great place to put fish farms

P52 Supporting Sustainable Aquatic and Coastal Development 5.18 The coastal area of Argyll and Bute is an exceptional asset. The coastline is of national, and in some parts international, significance, containing many areas of special landscape and ecological significance. It is therefore important that the character and environmental qualities of the coast are protected from inappropriate development, and development that requires a coastal location is directed to the least environmentally sensitive areas. Hasn't A&B Council just written exactly why fish farms should not be allowed to continue

P85 Water Quality and Environment 7.47, 7.48, Policy 59-Water Quality and the Environment again, could anyone in good conscience say that fish farms in any way meet these criteria

P87 – 88 Waste Related Development and Waste Management 7.52 – 7.56, Policy 63 Waste Related Development and Waste Management I wholeheartedly support the Zero Waste Plan and recycle and compost myself, but I do wonder why on land as individuals we are so encouraged/required to do such things when a fish farm can dump/leach fish feed, antibiotics and other medicines, lice treatment chemicals and fish faeces with no responsibility for it, an average farm creating the waste equivalent of approximately 35,000 people

P94 High Quality Environment 9.1 Argyll and Bute's natural environment, including our biodiversity, geodiversity, soils, landscapes, seascapes and night skylscapes is recognised by a wide range of stakeholders as being truly outstanding, both in diversity and quality, and is protected through established European and UK legislation, national and local planning policies. It is also increasingly recognised as a significant economic and social asset that local communities benefit from both directly, through the provision of jobs associated with our environment, and indirectly, through increasing our sense of well-being. Therefore, the sustainable development principles and policies of this plan seek to safeguard the natural environment in all its facets. again, haven't A&B Council just written exactly why fish farms should not be found along our coastlines?